

back of the stipe, and attaining an extraordinary length as compared with their breadth.

Loc. Rare in the upper beds of the Skiddaw Slates, Ellergill, near Milburn, Thornship Beck, near Shap, and Eggbeck, near Pooley.

EXPLANATION OF PLATE XI.

- Fig. 1.* Specimen of *Dichograpus fragilis*, n. sp., nat. size.
Fig. 2. The same, enlarged.
Fig. 3. Portion of the same, enlarged still further, to show the cellules.
Fig. 4. Portion of *Dichograpus annulatus*, n. sp., showing the transverse ridges.
Fig. 5. Portion of the same, enlarged.
Fig. 6. *Trigonograpus lanceolatus*, n. sp., enlarged.
Fig. 7. *Diplograpus Hopkinsoni*, n. sp., enlarged.
Fig. 8. *Diplograpus armatus*, n. sp., enlarged.
Fig. 9. Portion of *Diplograpus Hughesi*, n. sp., greatly enlarged, to show the cellules.
Fig. 10. *Diplograpus Hughesi*, enlarged.
Fig. 11. *Diplograpus sinuatus*, n. sp., enlarged.
Fig. 12. *Diplograpus bimucronatus*, n. sp., enlarged.
Fig. 12'. Fragment of another specimen of *D. bimucronatus*, enlarged, to show the cellules.
Fig. 13. *Diplograpus insectiformis*, n. sp., enlarged.
Fig. 14. Upper portion of *Diplograpus vesiculosus*, n. sp., slightly enlarged.
 (The serration of the margin in this figure is too pronounced.)
Fig. 15. Portion of *D. vesiculosus*, enlarged, showing the cellules, axial tube, and base.
Fig. 16. *Climacograpus innotatus*, n. sp., enlarged.
Fig. 17. Portion of *C. innotatus*, greatly enlarged, to show the cellules.
Fig. 18. *Climacograpus tuberculatus*, n. sp., enlarged.
Fig. 19. *Graptolites argenteus*, n. sp., enlarged.
Fig. 20. *Didymograpus affinis*, n. sp., enlarged.
Fig. 21. *Didymograpus fasciculatus*, n. sp., enlarged.
Fig. 22. Portion of *D. fasciculatus*, still further enlarged, to show the cellules.

XXVIII.—Descriptions of four new Species of Diurnal Lepidoptera of the Genus *Thyca*. By A. G. BUTLER, F.L.S. &c.

Genus THYCA, Wallengren.

1. *Thyca Ithiela*, sp. nov.

♂. Alæ supra nigrae : anticeæ velut in *T. Horsfieldii* cinereo plagiæ et maculatae : posticeæ macula magna subcostali subovali aureo-flava apud basin posita, maculis quinque discalibus, serie angulari velut in *T. Horsfieldii* positis, maculisque quinque cinerascentibus semicircularibus submarginalibus ; area abdominali cinerea, haud flavo maculata : corpus nigro-cinereum, antennis nigris.

Alæ subtus fere velut in *T. Horsfieldii*, maculis autem posticarum

multo minoribus et latius separatis: corpus cinereum, abdomine albicante; antennis nigris, cinereo-squamosis.

Exp. alar. unc. 3, lin. 8 $\frac{1}{2}$.

Hab. Penang. ♂. Presented 1860, by the Hon. East-India Company.

♂. Obtained 1843, from Mr. L. James. B.M.

This handsome species is larger than the nearly allied *T. Horsfieldii*, and may be distinguished from it at a glance by the smaller spots on both surfaces of the posterior wings, and the absence of any yellow patch upon the abdominal margin.

2. *Thyca fragalactea*, sp. nov.

♂. Alæ supra simillimæ iis *T. Argenthonæ*, area autem apicali anticarum et marginali posticarum angustius nigrescente.

Alæ subtus simillimæ iis *T. Argenthonæ*: anticæ autem maculis apicalibus albis magis regularibus, margineque magis regulari et angustiore, maculam albam statim pone cellam haud exhibente: posticæ area basali flava multo profundiore, nec ad basin obscurata; macula coccinea discoellulari a maculis submarginalibus late separata et aream apicalem intus limitante; maculis submarginalibus minus albo cinctis: corpus album.

Exp. alar. unc. 3, lin. 1.

Hab. North coast of Australia. Presented 1846 and 1853, by the Earl of Derby, and collected by Mr. Macgillivray. B.M.

Closely allied to *T. Argenthona*, but quite distinct.

3. *Thyca Lucerna*, sp. nov.

♂. Alæ supra simillimæ iis *T. Henningiae*: anticæ fascia obliqua submedia multo angustiore et cinerascente, striolis subapicalibus distinctioribus: posticæ fasciola cinerea obsoleta; plaga flava duplo majore: corpus nigro-cinereum.

Alæ subtus iis *T. Henningiae* persimiles fascia autem media anticarum angustiore, maculisque quinque subapicalibus albis; fascia marginali posticarum paulo latiore venisque angustius nigro marginatis: corpus thorace fusco-cinereo, abdomine albo.

Exp. alar. unc. 3, lin. 3.

♀. Alæ supra nigro-fuscæ: anticæ fere velut in *T. Pasithoë* ♀ maculatæ, fascia autem media albidiore et magis integra: posticæ plagiis tribus, maculisque quatuor squamosis a margine abdominali ad apicem serie decrescente arcuata currentibus; squamis nonnullis in cella discoidali vena mediana ab his separatis: corpus thorace nigro; abdomine albo, stria dorsali cinerea; antennis nigris.

Alæ subtus velut in mari at pallidiores et maculis sex anticis subapicalibus albis.

Exp. alar. unc. 3, lin. 2.

Hab. ♂ ♀. Philippines. Obtained 1867, through Mr. Higgins. B.M.

Allied to *T. Henningia*, and intermediate in character between it and *T. Pasithoë*.

4. *Thyca ochreopicta*, sp. nov.

♂. Alæ supra nigro-fuscae: anticæ fere velut in *T. Egialea*, albido fasciatæ et cinereo punctatæ: posticæ iis *T. Henningiae* simillimæ; plaga autem abdominali breviore et ochracea: corpus nigro-cinereum.

Alæ subtus iis *T. Henningiae* persimiles: anticæ autem fascia alba, magis obliqua, striolis quinque subapicalibus: posticæ ochraceo-flavæ, striola basali coccinea angustiore: corpus thorace nigro, abdomine albido.

Exp. alar. unc. 2, lin. 9—unc. 3.

Hab. ♂. Philippines. Obtained 1866; collected by Herr G. Semper. B.M.

♂. Obtained 1867, through Mr. Higgins.

This species, though very closely allied to *T. Henningia*, may be readily distinguished by its more arched anterior wings, and the more ochraceous colouring of the yellow in the posterior wings, with several other differences. It may be regarded as intermediate between *T. Henningia* and *T. Egialea*.

XXIX.—*The Myology of Cyclothurus didactylus*. By JOHN CHARLES GALTON, M.A., F.L.S., Lecturer on Comparative Anatomy at Charing Cross Hospital*.

[Plate VIII.]

THROUGH the kindness of Prof. Flower, F.R.S., Conservator of the Museum of the Royal College of Surgeons, I have been enabled to examine the muscles of a specimen of the Two-toed Anteater (*Cyclothurus didactylus*, Lesson†). The animal was

* Communicated by the Author, having been read at the Meeting of the British Association for the Advancement of Science, at Exeter, August 24, 1869.

† See 'Revision of the Genera and Species of Entomophagous Edentata,' by Dr. J. E. Gray, F.R.S. (Proc. Zool. Soc. April 1865, p. 385 and pl. 19).

No mention is made of this species of Anteater either in the French edition (2 vols. Paris, 1801) of Don Felix d'Azara's Essays on the Natural History of the Quadrupeds of Paraguay, or in Dr. Rengger's 'Naturgeschichte der Säugethiere von Paraguay,' Basel, 1830. In the first volume (the only one ever published), however, of an English translation from the original Spanish of the former author, by Mr. W. Perceval Hunter, F.G.S. (Edin. 1838), we are informed (p. 163) that "Buffon describes a third species of Anteater;" and the Don proceeds, somewhat scoffingly, to question the correctness of the observations of this unfortunate butt of natu-